

[54] **ALKYL, POLY(OXYETHYLENE)
POLY(CARBONYLOXYETHYLENE)
ACRYLATE EMULSION COPOLYMERS
FOR THICKENING PURPOSES**

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252/8.5 A, 174.24, 315.4**

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[57]

ABSTRACT

There are disclosed polymerizable alkyl poly(oxyethylene) poly(carbonyloxyethylene)acrylates and copolymers thereof, especially stable, aqueous dispersions of water-insoluble emulsion copolymers of (1) about 10–70% by weight of (meth)acrylic, (2) about 0.5–25% by weight of an alkyl poly(oxyethylene) poly(carbonyloxyethylene) acrylate, and (3) at least 25% by weight, to a total of 100%, of a C₁–C₄ alkyl (meth)acrylate, and, optionally included in the total monomer mixture, a small amount, about 0.05–1% by weight, of a polyethylenically unsaturated monomer. The copolymers, when neutralized and solubilized by addition of an alkali, are high efficiency thickeners for aqueous systems and have improved tolerance to ionic or electrolyte content. Typical systems that can be thickened are paint latices, dye pastes for preparations, food preparations, ionic detergents, dye pastes for textiles, pharmaceuticals, and oil well drilling muds. Surfactants enhance the thickening properties afforded by the copolymers.

22 Claims, No Drawings